

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior revisions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A camera Camera arrangement, in particular for use in a motor vehicle, ~~including~~ comprising

a printed circuit board with an image sensor and an objective lens carrier[[,]]; and

an objective lens for projecting an image onto the image sensor;

the objective lens being connected by a connecting means to the objective lens carrier;;

characterised in that the connecting means is being one or more ball segment-shaped housing sections, said sections being which are provided terminally of the objective lens and which are said sections being held in a cylindrical bore of the objective lens carrier, the connecting means being suitable for sliding the objective lens relative to the image sensor as well as pivoting it.

2. (Currently Amended) The camera Camera arrangement according to claim 1, wherein ~~characterised in that~~ the ball segment-shaped housing section and the cylindrical bore are mounted so as to be slidable and pivotable relative to each other by a loose fit.

3. (Currently Amended) The camera Camera arrangement according to claim 1, ~~characterised in that~~ wherein the objective lens, the printed circuit board with the image sensor and the objective lens carrier [[(11)]] are accommodated in a housing.

4. (Currently Amended) The camera ~~Camera~~ arrangement according to claim 1, wherein ~~characterised in that~~ the ball segment-shaped section is injection moulded integrally on the objective lens or glued to the objective lens ~~[(5)]~~.

5. (Currently Amended) The camera ~~Camera~~ arrangement according to claim 1, wherein ~~characterised in that~~ the objective lens carrier ~~[(11)]~~ is made of a material which is permeable to laser radiation.

6. (Currently Amended) A method ~~Method~~ for the adjustment of a camera arrangement comprising:

a)——introducing an objective lens into the objective lens carrier in a predetermined initial position ~~[[W₁]]~~;

b)——reading out information from an image sensor and determining a contrast value in a predetermined image region, determining a first weighted average of contrast values and storing the weighted average linked with ~~[[the]]~~ a respective distance position ~~[[W_n]]~~ in an evaluating device;

e)——sliding the objective lens by a distance section ~~[[Δz]]~~ in the direction of the image sensor;

d)——repeating said determining a first weighted average step ~~steps b)~~ and said sliding step e) until the ball segment-shaped housing section reaches a predetermined end position ~~[[W_{end}]]~~;

e)——sliding the objective lens into ~~[[the]]~~ a distance position W_{\max} in which the value of the stored weighted averages is maximal;

f)——pivoting the objective lens into a predetermined first initial pivot position $[[S_{\alpha 1}]]$;

g)——reading out the image sensor information and determining the contrast values in the predetermined image regions, determining a second weighted average of the contrast values and storing the second weighted average linked with ~~[[the]]~~ a respective pivot position $[[S_{\alpha n}]]$ in an evaluating device;

h)——pivoting the objective lens by a pivot angle $[[\Delta\alpha]]$ in a predetermined first pivot direction $[[a]]$;

i)——repeating said determining a second weighted average step steps g) and said pivoting step h) until a predetermined first end position $[[S_{\alpha \text{end}}]]$ is reached;

j)——pivoting the objective lens into ~~[[the]]~~ a pivot position $S_{\alpha \max}$ in which the value of the stored second weighted averages is maximal;

k)——connecting the ball segment-shaped housing section to the cylindrical bore.

7. (Currently Amended) The method Method for the adjustment of a camera arrangement according to claim 6, further comprising:

a)——pivoting the objective lens $[[(5)]]$ in a second pivot direction $[[b]]$ orthogonal to the pivot direction $[[a]]$ into a second initial pivot position $[[S_{\beta 1}]]$;

b)——reading out the image sensor information and determining ~~[[the]]~~ a contrast value values in predetermined image regions, determining a third weighted average of

the contrast values and storing the weighted average linked with ~~[[the]]~~ a second respective pivot position $[[S_{\beta n}]]$ in the evaluating device;

e)——pivoting the objective lens by a second pivot angle $[[\Delta\beta]]$ in the direction opposite the second pivot direction $[[b]]$;

d)——repeating said determining a third weighted average step ~~steps m)~~ and said pivoting step n) until a predetermined second end position $S_{\beta \text{end}}$ is reached;

e)——pivoting the objective lens into ~~[[the]]~~ a pivot position $S_{\beta \text{max}}$ in which the value of the pre-stored weighted averages is maximal.

8. (Currently Amended) The method ~~Method~~ for the adjustment of a camera arrangement according to claim 6, wherein ~~characterised in that~~ the predetermined image regions are at least the picture elements which lie on a radius $R = \frac{1}{4} * \text{the width of the image}$ about the image center to be expected.

9. (Currently Amended) The method ~~Method~~ for the adjustment of a camera arrangement according to claim 6, wherein ~~characterised in that~~ the contrast values are determined by a modulation transfer function.

10. (Currently Amended) The method ~~Method~~ for the adjustment of a camera arrangement according to claim 6, wherein ~~characterised in that~~ the ball segment-shaped housing section and the cylindrical bore are connected to each other by laser welding or gluing.

11. (Currently Amended) The method ~~Method~~ for the adjustment of a camera arrangement according to claim 6, wherein ~~characterised in that~~ the measured contrast values are contrast values independent of each other for the colour values red, green and blue.

12. (Currently Amended) The method ~~Method~~ for the adjustment of a camera arrangement according to claim 6, wherein ~~characterised in that~~ the colour values are weighted with a factor, the green contrast values being more heavily weighted than the red contrast values and the red contrast values more heavily than the blue contrast values.

13. (New) The camera arrangement of claim 1 further comprising a controller, said controller being configured to:

introduce an objective lens into the objective lens carrier in a predetermined initial position;

read out information from an image sensor and determine a contrast value in a predetermined image region, determine a first weighted average of contrast values and storing the weighted average linked with a respective distance position in an evaluating device;

to slide the objective lens by a distance section in the direction of the image sensor;

to repeat said determination of said first weighted average and said slide until the ball segment-shaped housing section reaches a predetermined end position;

to slide the objective lens into the distance position W_{max} in which the value of the stored weighted averages is maximal;

to pivot the objective lens into a predetermined first initial pivot position;

to read out the image sensor information and to determine the contrast values in the predetermined image regions, to determine a second weighted average of the contrast values and to store the second weighted average linked with the respective pivot position in an evaluating device;

to pivot the objective lens by a pivot angle in a predetermined first pivot direction;
to repeat said determination of said second weighted average and said pivot until
a predetermined first end position is reached;
to pivot the objective lens into the pivot position $S_{\alpha\max}$ in which the value of the
stored second weighted averages is maximal.

14. (New) The method for the adjustment of a camera arrangement according to claim
6, further comprising said controller being further configured to:

pivot the objective lens in a second pivot direction b orthogonal to the pivot
direction into a second initial pivot position;

read out the image sensor information and determine contrast values in
predetermined image regions, determine a third weighted average of the contrast values and
storing the weighted average linked with a second respective pivot position in the evaluating
device;

pivot the objective lens by a second pivot angle in the direction opposite the
second pivot direction;

repeating said determination of said third weighted average and said pivot until a
predetermined second end position $S_{\beta\text{end}}$ is reached;

pivot the objective lens into a pivot position $S_{\beta\max}$ in which the value of the pre-
stored weighted averages is maximal.

15. (New) The method for the adjustment of a camera arrangement according to claim
6, wherein the predetermined image regions are at least the picture elements which lie on a
radius $R = \frac{1}{4} \cdot \text{the width of the image about the image center}$ to be expected.

16. (New) The method for the adjustment of a camera arrangement according to claim 6, wherein the contrast values are determined by a modulation transfer function.

17. (New) The method for the adjustment of a camera arrangement according to claim 6, wherein the measured contrast values are contrast values independent of each other for the colour values red, green and blue.

18. (New) The method for the adjustment of a camera arrangement according to claim 6, wherein the colour values are weighted with a factor, the green contrast values being more heavily weighted than the red contrast values and the red contrast values more heavily than the blue contrast values.